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DESCRIPTIONS OF NEW MAMMALS FROM
ARIZONA AND SONORA, MEXICO

BY

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During the past four years there has been accumulated in the collection of the San Diego Society of Natural History a small series each of a number of mammals from southwestern Arizona and the northwestern coastal district of Sonora, Mexico. Study of this material has revealed the presence of several apparently undescribed races which are herewith named.

The writer wishes to express his gratitude and appreciation to Mrs. Florence V. V. Dickey and Mr. A. J. van Rossem for loan of specimens from the Dickey collections in Pasadena, California; to Dr. E. Raymond Hall of the Museum of Vertebrate Zoology, Berkeley, California, for the loan of comparative material; and to Mr. Bernard Bailey for the use of specimens from his private collection now on deposit in the Natural History Museum in San Diego, California. The skull illustrations are by Mr. Allan J. Stover.

***Neotoma lepida aureotunicata* subsp. nov.**

PUNTA PENASCOSA DESERT WOOD RAT

Type.—From Punta Peñascosa, Sonora, Mexico; no. 10907, collection of the San Diego Society of Natural History; adult male; collected by Laurence M. Huey, February 14, 1934.

Characters.—A race of *Neotoma lepida* characterized by very bright buff color, with a suffusion of buffy over entire dorsal and belly surfaces of the body; tail bicolored, and feet white. The molar series of *aureotunicata* is slightly longer and heavier than that of either *Neotoma lepida flava* or *Neotoma lepida auripila*.

MEASUREMENTS OF 3 *Neotoma lepida aureotunicata*

Collection of S. D. S. N. H.	Sex	Total length	Tail	Hind foot	Ear	Greatest length of skull	Condylebasal length	Zygomatic breadth	Interorbital constriction	Nasals	Alveolar length of upper molar series
10852	♂, ♀	305	155	32	30	38.9	37.0	20.5	5.0	14.3	8.4
10907 ¹	♂	292	141	31	27	37.5	36.2	19.6	5.1	14.2	8.2
10934	♂	305	141	30	25	39.3	37.5	20.0	5.0	15.2	8.2

Range.—Known only from the type locality.

Comparisons.—Compared with *N. l. flava* from Tinajas Altas, Gila Mountains, Yuma County, Arizona, *N. l. aureotunicata* is much deeper in color, with a bicolored tail, dark ears and slight buffy suffusion on belly. Compared with *N. l. auripila*, from Agua Dulce Mountains, Pima County, Arizona, much brighter in color, with less blackish cast dorsally, bicolored tail and lighter buffy suffusion on belly. Blossom (Occas. Papers of the Museum of Zoology, Univ. of Michigan, No. 315, May 29, 1935) described a smallish, dark form, *N. l. bensoni* from the Pinacate lava beds, Sonora Mexico. I have not seen specimens of *bensoni*, but from the description, it is a much darker race than *aureotunicata* and confined to the black lava of the Pinacate region.

Remarks.—The three specimens which form the basis of this newly described race were taken from a small group of rocky hills that form the promontory of Punta Peñascosa. This locality is completely isolated as far as terrain inhabitable by *Neotoma lepida* is concerned. The nearest locality this species is known to inhabit is the Pinacate range, which lies over twenty miles northward and is separated from Punta Peñascosa by that distance of bleak, sandy, level desert, an association hostile to the species. From the experience of the writer and from published accounts of the general region, it would seem that *Neotoma lepida* inhabits the higher rocky slopes of all these desert ranges in southwestern Arizona and adjacent Sonora. In most cases this rocky type of habitat is separated by intervening valleys and wide plains of sandy desert, which are uninhabitable by this species. Thus biological islands are formed and the *Neotoma lepida* population is divided into isolated groups. As with islands in the sea, the smaller the area the more susceptible are the inhabitants to specialized development. In fact further study and exploration of this general desert region, both in southwestern Arizona and northwestern Sonora, will without doubt bring to light additional well-marked races of this species.

Specimens examined.—*Neotoma lepida auripila*: 3 from Agua Dulce Mountains, 7 miles east of Papago Well, Pima County, Arizona; *Neotoma lepida flava*: 4 from Tinajas Altas, Yuma County, Arizona; *Neotoma lepida aureotunicata*; 3 from type locality as above.

¹ Type.

*Neotoma lepida harteri*² subsp. nov.

GILA BEND DESERT WOOD RAT

Type.—From 10 miles south of Gila Bend (or, exactly, from the summits of a group of lava hills on the east side of the Ajo railroad, about 2 miles north of Black Gap), Maricopa County, Arizona; no. 11462, collection of the San Diego Society of Natural History; adult male; collected by Laurence M. Huey, February 8, 1936.

Characters.—A dark, blackish-colored race of *Neotoma lepida* with medium body size, relatively long tail and small hind feet. In body size *harteri* is larger than its southern relatives, *N. l. auripila* or *N. l. flava*, more nearly approaching the average body measurement given by Benson in his paper describing *N. l. flava* (Occas. Papers of the Museum of Zoology, Univ. of Michigan, No. 317, July 1, 1935, table, pp. 4-5) for *Neotoma lepida devia* from the Painted Desert in northern Arizona, which is the region nearest the type locality of *devia* from which he had specimens. However, in color *harteri* is quite different from the three forms above mentioned, being dark (nearly black) dorsally, with the under color tending towards grayish rather than towards the buffy cast found in the southern Arizona and Sonoran forms of *N. lepida*. The tail of *harteri* is dark (nearly black), in about 60% of the specimens examined varying but slightly on the ventral side to dusky, and in the remainder uniformly colored above and below. In this tail character *harteri* stands apart from all the specimens of either *auripila*, *flava* or *devia* so far examined. The ears of *harteri* are deep, dusky black. The median line on the side is buffy, with a buffy suffusion covering the belly. A white pectoral patch and a white inguinal patch of relatively large size are present on all the specimens of this race examined. These white patches approach in size those of *devia* and are not restricted to a small area as in *auripila*. Cranially, *harteri* compares closely with *auripila* and *flava*, but differs slightly from *devia* in a few minor characters.

Measurements.—*Type*: Total length, 280; tail, 135; hind foot, 29; ear, 28. *Skull (type)*: Greatest length, 36.5; condylobasal length, 34.6; zygomatic breadth, 19.9; interorbital constriction, 5.4; nasals, 13.0; alveolar length of upper molar series, 7.3.

Range.—So far as known, the hills south of Gila Bend, Arizona, but further collecting may reveal *N. l. harteri* to have an extensive range in the desert mountains to the eastward of the type locality.

Specimens examined.—Besides the list mentioned in the preceding description:—*Neotoma lepida devia*: 5 from Hoover Dam Ferry, Mohave County, Arizona; 3 from Mud Spring, 12 miles WSW of Chloride, Mohave County, Arizona; 3 from foot of The Needles, Colorado River, Mohave County, Arizona; 1 from Colorado River above Bill Williams River, Mohave County, Arizona; 2 from 10 miles below Cibola, Colorado River, Yuma County, Ari-

² It gives the writer pleasure to dedicate this race to Samuel George Harter who as a youth chose natural science as his life-work and has been the writer's companion on many desert collecting trips.

zona; 4 from base of Castle Dome, Yuma County, Arizona; 2 from 10 miles east of Quartzsite, Yuma County, Arizona. *Neotoma lepida harteri*: 9 from type locality as above.

Ammospermophilus harrisii kinoensis subsp. nov.

SONORA ANTELOPE GROUND SQUIRREL

Type.—From Bahia Kino, Sonora, Mexico; no. 11284, collection of the San Diego Society of Natural History; adult female; collected by Laurence M. Huey, February 22, 1935.

Characters.—This race is characterized by being darker and more grizzled dorsally and having lighter-colored hind feet than either *Ammospermophilus harrisii harrisii* or *Ammospermophilus harrisii saxicola*. The molar teeth are smaller and the tooth row is slightly shorter than in either of the other races mentioned. *A. b. kinoensis* also differs from *saxicola* in having larger hind feet.

Measurements.—*Type*: Total length, 229; tail, 80; hind foot, 40; ear, 5. *Skull (type)*: Greatest length, 38.3; zygomatic breadth, 23.2; interorbital constriction, 10.8; nasals, 10.8; alveolar length of upper molar series, 6.8; longitudinal length of bullae, 9.9.

AVERAGE MEASUREMENTS OF *Ammospermophilus harrisii*

Locality	Total length	Tail	Hind foot	Greatest length of skull	Zygomatic breadth	Interorbital constriction	Alveolar length of upper molar series	Nasals	Longitudinal length of bullae
Tinajas Altas	230.3 ³	80.4	37.7	38.0	22.6	9.7	7.0	11.6	9.8
Camp Verde	232.2 ⁴	80.8	39.8	40.0 ⁵	23.6	10.3	7.0	10.3	10.6
Bahia Kino	234.5 ⁶	83.0	40.2	39.2	22.9	10.4	6.8	11.3	9.7

Range.—So far as known, coastal district of Sonora, Mexico, from Porto Libertad south to Bahia Kino.

Remarks.—The fact that Audubon and Bachman named *A. harrisii* without giving a locality from which the original specimen was collected has led to some speculation. Merriam (N. A. Fauna, No. 2, Oct. 30, 1889, pp. 19-20) properly allocated this species to southern and western Arizona; and since then Mearns (Proc. U. S. Nat. Museum, Vol. 18, p. 444 — advanced sheets published March 25, 1896) divided the species into two races, describing his form *A. b. saxicola* from Tinajas Altas, Yuma County, in southwestern Arizona. Comparison of Arizona material substantiates the fact that two tenable forms are existent in the

³ 15 specimens.

⁴ Body measurements taken from table of 20 specimens in Mearns, Mam. of Mex. Boundary, pp. 307-308.

⁵ Skull measurements from 7 specimens in collection of Bernard Bailey.

⁶ 7 specimens.

area south and west of the great Mogollon plateau, though there is still a question of how the names may, in the future, be applied. The crux of this question lies in the possibility of some future student being able to designate the type locality of *A. harrisii*. The writer has followed Mearns and used the measurements of specimens from Fort (= Camp) Verde, Arizona, as most typical of the race *harrisii*.

When adequate material is assembled "the long tail" character assigned by Mearns to his race *saxicola* vanishes. However, the specimens from southwestern Arizona are discernible by their lighter coloration. In fact, color is the main character by which the group *harrisii* has been divided into these races, and this character is more readily seen in series than individually.

Specimens examined.—*Ammospermophilus harrisii harrisii*: 8 from Camp Verde, Yavapai County, Arizona; tabulated body measurements of 20 specimens from same locality (see Mearns, Mam. of Mexican Boundary of United States, Bull. U. S. Nat. Mus., No. 56, pp. 307-308); 2 from Wickenburg, Maricopa County, Arizona; 5 from 6 miles northeast of Paradise, Cochise County, Arizona; 1 from 25 miles south of Tucson, Pima County, Arizona; 1 from 5 miles northwest of Sells, Pima County, Arizona. *Ammospermophilus harrisii saxicola*: 15 from Tinajas Altas, Gila Mountains, Yuma County, Arizona (type locality); 3 from 7 miles east of Papago Well, Pima County, Arizona; 3 from Punta Peñascosa, Sonora, Mexico. *Ammospermophilus harrisii kinoensis*: 6 from Porto Libertad, Sonora Mexico; 7 from Bahía Kino, Sonora, Mexico (type locality).

Thomomys bottae growlerensis subsp. nov.

GROWLER VALLEY POCKET GOPHER

Type.—From 7 miles east of Papago Well, Pima County, Arizona (or, exactly, along a well wooded desert wash on the southwestern side of a range of hills in the southern end of Growler Valley; the Agua Dulce Mountains form the southern boundary of this locality and are not far distant); no. 12387, collection of the San Diego Society of Natural History; adult male; collected by Laurence M. Huey, March 16, 1937.

Characters.—In color *Thomomys bottae growlerensis* differs from *T. b. phasma*, its nearest western relative, by being brighter, more golden and lacking the pallid appearance of either *T. b. phasma* or *T. b. depauperatus*. The skull of *growlerensis*, compared with those of *T. b. phasma* and *T. b. vanrossemi* (this latter form from Punta Peñascosa, Sonora, but in the same general desert area) is narrower, the zygomatic arches are less sharply angled and the audital bullae are more rounded. The interpterygoid space of *growlerensis* is narrower than that of *phasma* and wider than that of *vanrossemi*.

Measurements.—*Type*: Total length, 208; tail, 62; hind foot, 30; ear, 5. *Skull (type)*: Condylbasal length, 37.4; spread of maxillary arches, 22.7; interorbital constriction, 6.7; nasals, 13.3; alveolar length of upper molar series, 7.5.

Range.—Known only from the type locality.

Specimens examined.—*Thomomys bottae phasma*: 9 from Tule Well, Yuma County, Arizona (near type locality). *Thomomys bottae depauperatus*:

15, of which 9 were from 2 miles north of Tinajas Altas (= 7 miles south of Raven Butte), and 6 from proximity of Tinajas Altas, Yuma County, Arizona. *Thomomys bottae vanrossemi*: 12, including type, from Punta Peñascosa, Sonora, Mexico. *Thomomys bottae growlerensis*: 8 from the type locality as given above..

***Thomomys bottae comobabiensis* subsp. nov.**

COMOBABI POCKET GOPHER

Type.—From 5 miles northwest of Sells, Pima County, Arizona (elevation, approximately 2400 feet); no. 12460, collection of the San Diego Society of Natural History; adult female; collected by Laurence M. Huey, March 22, 1937.

Characters.—A medium-sized, brownish-colored gopher, more nearly resembling those found on the higher parts of the mountains of south-central Arizona. The skull resembles that of *Thomomys bottae modicus*, but is smaller, with rounder, more inflated bullae and relatively shorter, heavier rostrum.

Measurements.—*Type*: Total length, 215; tail, 70; hind foot, 28; ear, 4. *Skull (type)*: Condylbasal length, 35.7; spread of maxillary arches, 21.4; interorbital constriction, 6.5; nasals, 12.1; alveolar length of upper molar series, 7.6.

Range.—Known only from the type locality.

Remarks.—Goldman described *Thomomys bottae pusillus* (Journ. Wash. Acad. Sciences, Vol. 21, No. 17, Oct. 19, 1931, p. 422) from a single adult female specimen. The measurements given by him indicate *pusillus* to be a diminutive form, not approaching the size of the race here described.

Specimens examined.—*Thomomys bottae modicus*: 4 from Tubac, Santa Cruz County, Arizona; 11 from Santa Cruz River, 2 miles south of Tumacacori Mission, Santa Cruz County, Arizona; 2 from Tucson, Arizona; 12 from Fort Lowell, Pima County, Arizona. *Thomomys bottae comobabiensis*: 7 from the type locality as given above.

***Thomomys bottae aridicola* subsp. nov.**

GILA BEND POCKET GOPHER

Type.—From 10 miles south of Gila Bend (or, exactly, on Ajo railroad right of way, about 2 miles north of Black Gap), Maricopa County, Arizona; no. 11424, collection of the San Diego Society of Natural History; adult female; collected by Laurence M. Huey, February 1, 1936.

Characters and Remarks.—A medium-sized, slightly tawny-appearing gopher, tending in color towards the preceding form described in this paper rather than towards the more buffy pallid types of gophers inhabiting the desert regions to the westward. In skull characters, the resemblance lies in the same direction, but *aridicola* has a longer, more flattened brain-case, with wider-spreading zygomatic arches and a more slender rostrum. The skull of *aridicola* is weak and light-boned and may show a relationship to *T. b. subsimilis*. *T. b. aridicola*

is not related to either *T. harquahalae* or *T. b. cervinus*, as comparison of measurements clearly demonstrates. The incisors do not project beyond the nasals.

Measurements.—*Type*: Total length, 212; tail, 63; hind foot, 29; ear, 5. *Skull (type)*: Condylobasal length, 36.7; spread of maxillary arches, 23.5; interorbital constriction, 6.8; nasals, 12.9; alveolar length of upper molar series, 7.5.

Range.—Known only from the type locality.

Specimens examined.—*Thomomys bottae aridicola*: 2 from type locality as given above. *Thomomys bottae cervinus*: 11 from Phoenix, Maricopa County, Arizona.

***Perognathus intermedius lithophilus* subsp. nov.**

PORTO LIBERTAD ROCK POCKET MOUSE

Type.—From Porto Libertad (or, exactly, the summit of a rocky hill 1½ miles NNW of the fresh water spring on the beach), Sonora, Mexico; no. 11211, collection of the San Diego Society of Natural History; adult male; collected by Laurence M. Huey, February 5, 1935.

Characters.—*Perognathus intermedius lithophilus* is darker and more grayish dorsally than either *Perognathus intermedius intermedius* or *Perognathus intermedius phasma* and lacks the pinkish cast found in these two northern races. In size *lithophilus* resembles *phasma* and is slightly smaller than *intermedius*. Cranially, the mastoid bullae are less extended and the posterior part of the skull is slightly more arched and deeper than in either of the other two mentioned forms.

Measurements.—*Type*: Total length, 166; tail, 91; hind foot, 19; ear, 5. *Skull (type)*: Occipitonasal length, 23.5; mastoid breadth, 12.7; interorbital constriction, 6.2; nasals, 9.3; alveolar length of upper molar series, 3.4. Eight specimens including the type averaged: Total length, 166.8 (162-170); tail, 91.7 (82-97); hind foot, 20.1 (19-21); ear, 5. *Skull*: occipitonasal length, 23.3 (22.4-24.2); mastoid breadth, 12.6 (12.2-12.9); interorbital constriction, 6.0 (5.9-6.2); nasals, 9.0 (8.8-9.3); alveolar length of upper molar series, 3.2 (3.1-3.4).

Range.—So far as known, the vicinity of Porto Libertad, Sonora, Mexico.

Specimens examined.—*Perognathus intermedius intermedius*: 48 from Castle Dome, Yuma County, Arizona; 1 from Ehrenberg, Yuma County, Arizona. *Perognathus intermedius phasma*: 53 from Tinajas Altas, Yuma County, Arizona. *Perognathus intermedius lithophilus*: 9 from Porto Libertad, Sonora, Mexico (type locality).

***Perognathus longimembris pimensis* subsp. nov.**

PIMA SILKY POCKET MOUSE

Type.—From 11 miles west of Casa Grande, Pinal County, Arizona; no. 12579, collection of the San Diego Society of Natural History; adult male; collected by Laurence M. Huey, May 22, 1937.

Characters.—The dorsal color of the type of *P. l. pimensis* is darker than *P. l. bombycinus*, nearly matching Ridgway's Avellaneous (Nom. of Color,

1912). This ground color resembles that of *P. l. panamintinus*, but *pimensis* lacks the blackish tipped hairs found on *panamintinus*. Cranially, these two races differ widely. The skull of *pimensis* is slightly larger than that of *bombycinus* and has a more rounded brain case and deeper, more inflated mastoid bullae. The zygomatic arches are more widely spreading anteriorly. The interparietal is small, nearly equal-sided, though this character is not one that can be used in contrast with *bombycinus*, but rather one that is shared with it and used when comparing with all other members of the *longimembris* group except *P. l. kinoensis* from Sonora, Mexico. In fact it is notable that these southwestern Arizona and Sonora forms of *longimembris* may be grouped by this character.

Measurements.—*Type*: Total length, 144; tail, 83; hind foot, 18; ear, 4. *Skull (type)*: Greatest length, 21.2; mastoid breadth, 12.2; interorbital constriction, 5.0; nasals, 7.4; tooth row, 2.7.

Range.—So far as known, from the vicinity west of Phoenix, Maricopa County, Arizona, south to the type locality west of Casa Grande, Pinal County, Arizona.

Remarks.—Records of *Perognathus longimembris* from Arizona are few. Osgood (Proc. Bio. Soc. Wash., Vol. 20, p. 19, Feb. 23, 1907) described *Perognathus bombycinus* (now *P. longimembris bombycinus*) from Yuma, basing his description on one specimen from that locality and two from northwestern Sonora, Mexico. Grinnell subsequently recorded (Univ. Pub. in Zool., Vol. 12, No. 4, p. 243, March 20, 1914) eighteen specimens of *P. bombycinus* taken on the Arizona side of the Colorado River at Ehrenberg. In 1931 Goldman described *Perognathus longimembris arizonensis* (Proc. Bio. Soc. Wash., Vol. 44, p. 134, Oct. 17, 1931) from 10 miles south of Jacobs Pools, Houserock Valley, north side of Marble Canyon of the Colorado River, Arizona. This form ranges north of the Grand Canyon and into southern Utah. Nine specimens from two localities in Arizona and one in Utah were represented in this description. So far as the writer is aware, these are the only localities of occurrence of *Perognathus longimembris* hitherto recorded for Arizona.

On October 17, 1930, Bernard Bailey collected a single specimen of *Perognathus longimembris*, now in the collection of the San Diego Society of Natural History, at Marinette, Maricopa County, Arizona; and on May 21 and 22, 1937, the writer captured two male specimens in a sandy area 11 miles west of Casa Grande, Pinal County. It is upon these three specimens that the present description is based. The single specimen from Marinette is in winter pelage and is darker and grayer than the Casa Grande specimens. It also does not have as well developed cranial characters, but is sufficiently close to *pimensis* to be included in the new race. However, a good series might prove it to be worthy of subspecific separation.

Specimens examined.—*Perognathus longimembris kinoensis*: 4 from Bahia Kino, Sonora, Mexico (including the type). *Perognathus longimembris bombycinus*: 2 from 6 miles east of Yuma, Arizona (type locality); 2 from 3 miles west of Pilot Knob, Imperial County, California; 3 from San Felipe, Lower California, Mexico. *Perognathus longimembris bangsi*: 3 from Palm Springs, Riverside County, California (type locality); 8 from below San Felipe Narrows, San Diego County, California. *Perognathus longimembris panamintinus*: 15 from

Junction Ranch, Argus Mountains, Inyo County, California; 6 from Nemo Canyon, Panamint Mountains, Inyo County, California; 7 from Harrisburg Flat, Panamint Mountains, Inyo County, California; 4 from mouth of Goler Canyon, Panamint Valley, Inyo County, California. *Perognathus longimembris pimensis*: 1 from Marinette, Maricopa County, Arizona; 2 from 11 miles west of Casa Grande, Pinal County, Arizona (type locality).

Bassariscus astutus yumanensis subsp. nov.

YUMA CACOMISTLE

Type.—From Tinajas Altas, Gila Mountains, Yuma County, Arizona; no. 12272, collection of the San Diego Society of Natural History; adult male; collected by Laurence M. Huey, March 6, 1937.

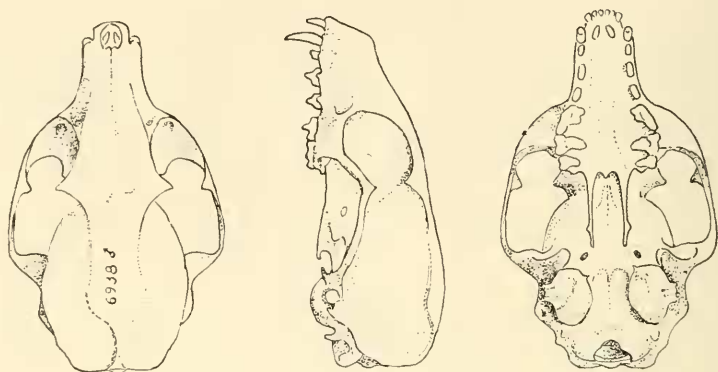
Characters and Comparisons.—A race of *Bassariscus astutus* differing from *B. a. arizonensis* of central and eastern Arizona in slightly smaller size, lighter dorsal color and having heavier proportions of black in the bands on the upper side of the tail. In this latter character *B. a. yumanensis* is similar to *B. a. octavus* of southern California, but has a more pallid color dorsally. Cranially *yumanensis* differs from both of the above mentioned races in having a smaller skull, with shorter, heavy rostrum, a more curving tooth row, a shallower brain case, and the tympanic bullae slightly shorter in length but rounder and much more deeply expanded when viewed in profile. (See Plate 23).

MEASUREMENTS IN MILLIMETERS

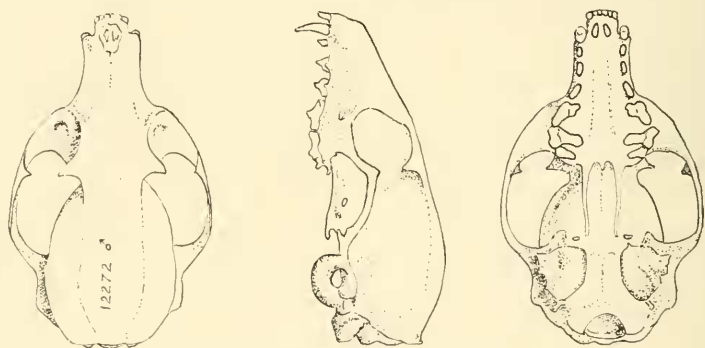
Collection of S. D. S. N. H.	Sex	Total length	Tail	Hind foot	Ear	Greatest length of skull	Condylbasal length	Zygomatic breadth	Breadth of rostrum over root canine	Interorbital constriction	Canine-molari- form tooth row
12226	♂	727	380	60	39	73.0	72.2	43.4	12.3	17.2	29.1
12271	♀	700	358	63	41	72.3	71.6	44.0	12.6	16.2	28.7
12272 ⁷	♂	738	395	66	46	75.1	74.8	46.6	12.7	15.8	29.8

Remarks.—The race *B. a. yumanensis* represents another form of lighter-colored, subspecifically different mammals from the southwestern desert section of Arizona. The range of *Bassariscus astutus* extends from Transition Zone in the north to Lower Sonoran or even Arid Tropical in the south. This provides a wide latitude of environmental conditions, and, as a result, when a good assemblage of specimens is brought together from widely separated localities, the effects of varied habitat are quickly discernible. This is true as regards both color and size. For example *yumanensis* has size tendency towards the Lower California form *palmarius*, but stands apart in color tone, as would be expected when the climatic variation of their two ranges is compared. Similarly, conditions of

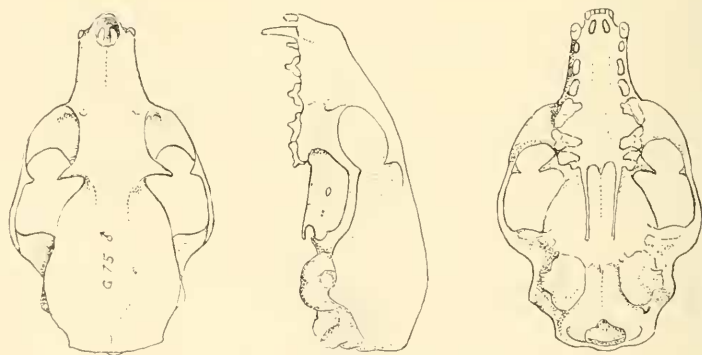
⁷ Type.



Bassariscus astutus arizonensis.



Bassariscus astutus yumanensis. (Type)



Bassariscus astutus octavus.

Comparison of *Bassariscus* skulls. $\times 3/5$

habitat are reflected in the appearance of the other races of the species.

There are two trapper-taken specimens in the Dickey collection labeled from Laguna Dam, Imperial County, California. Both of these specimens lack skull, front feet and measurements. One of them (no. 9975) is fairly representative in color of the race *yumanensis*, but the other (no. 9976) is doubtful and, judging from tail characters, is probably referable to *arizonensis*. However, without a skull the identity of this latter specimen cannot be definitely determined. The writer has positive knowledge of the presence of *Bassariscus* at this California locality, and he also knew the trapper and something of his travels. At the time these specimens were taken, he was a prospector, trapping as a side line, and was often away on short excursions into territory east of Tucson, Arizona, well within the range of *arizonensis*. His failure to appreciate the need of scientific accuracy, and the resemblance of no. 9976 to *arizonensis*, would tend to disqualify the locality data on this specimen.

Range.—Mountains of the arid region in extreme southwestern Arizona and southeastern California, and probably in contiguous territory of northwestern Sonora.

Specimens examined.—*Bassariscus astutus arizonensis*: 2 from 14 miles east of Fort Lowell, Pima County, Arizona. *Bassariscus astutus octavus*: 2 and 1 skull from San Luis Rey River, altitude 1700 feet, near Escondido, San Diego County, California; 1 from Bear Flat, San Antonio Canyon, Los Angeles County, California. *Bassariscus astutus raptor*: 1 from Eel River Bridge, Mendocino County, California; 1 from Low Gap, Trinity County, California; 1 from Hyampom, Trinity County, California; 1 from Bridgeville, Humboldt County, California; 2 from Eldridge, Sonoma County, California. *Bassariscus astutus palmarius*: 6 from San Ignacio, Lower California, Mexico. *Bassariscus astutus insulicola*: 2 from San José Island, Lower California, Mexico. *Bassariscus astutus saxicola*: 2 from Espiritu Santo Island, Lower California, Mexico. *Bassariscus astutus yumanensis*: 3 from Tinajas Altas, Gila Mountains, Yuma County, Arizona (type locality); 1 from Laguna Dam, Imperial County, California.

